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19991116 039

DRIC QUALITY INSPECTED 4



**“The Ballistic Missile Threat Is Broader,
More Mature, And Evolving More Rapidly
Than Has Been Reported By The
U.S. Intelligence Community.”**

*-The Rumsfeld Commission
August 4, 1998*

“...Provide For The Common Defense...”

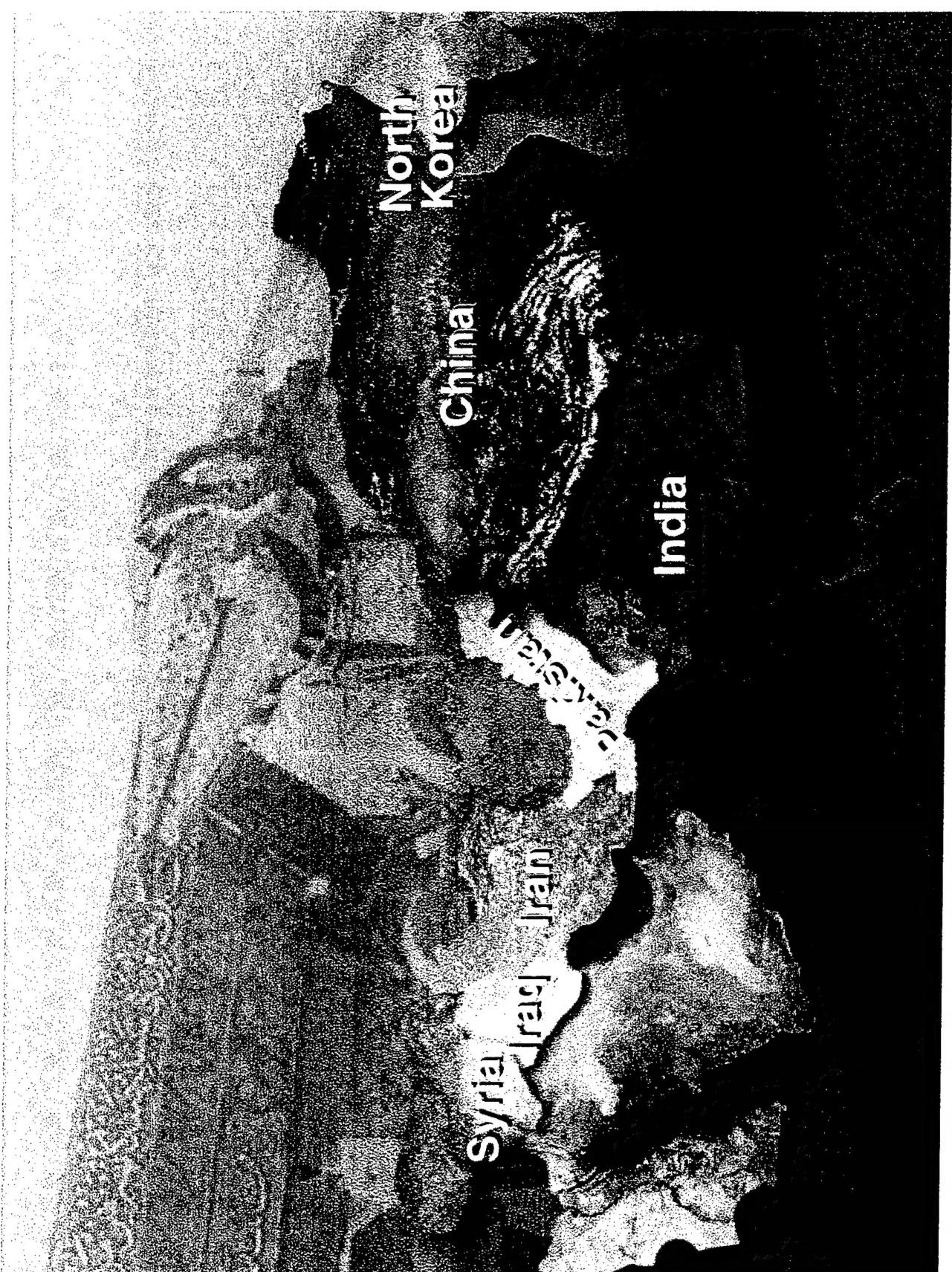
*-Preamble, Constitution Of
The United States*

North
Korea

China

India

Syria
Iraq
Iran



**“National Missile Defense
Development Has Been A
Priority For The Joint Chiefs
And The Unified Commanders.”**

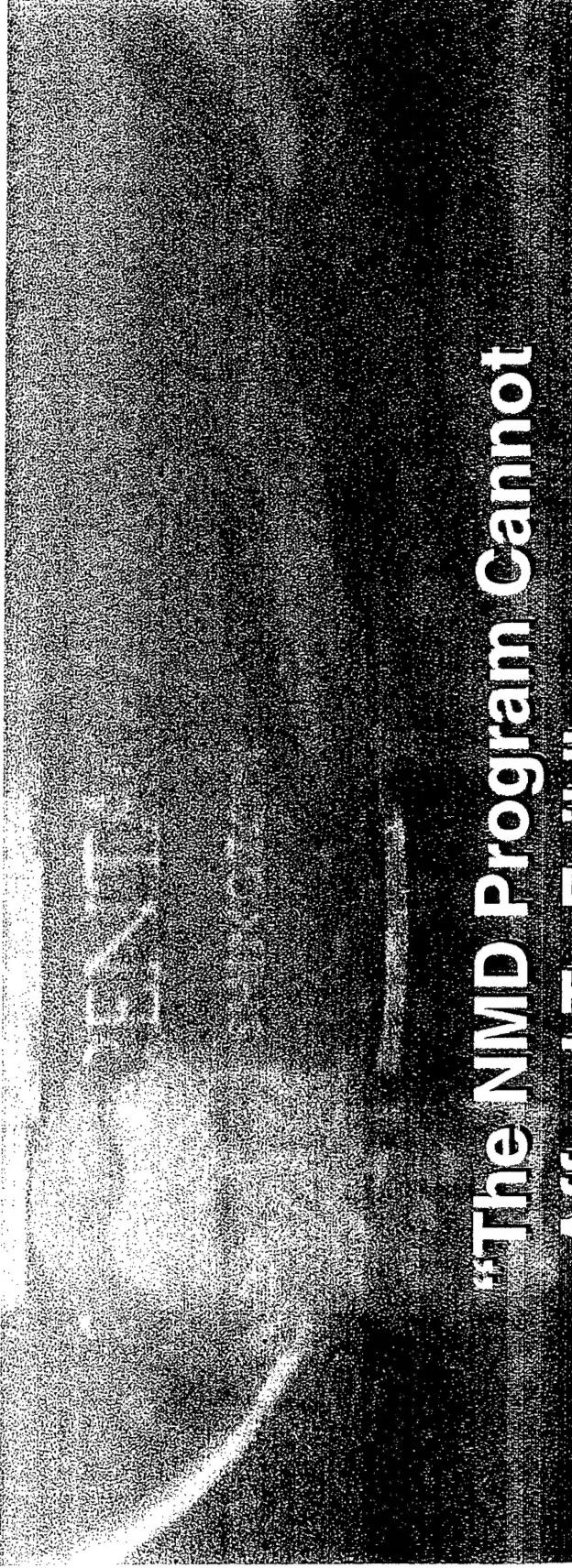
*General Henry H. Shelton
Chairman Joint Chiefs of Staff
January 20, 1999*

**“It Is The Policy Of The United States
To Deploy As Soon As Is Technologically
Possible An Effective National Missile
Defense System Capable Of Defending
The Territory Of The United States
Against Limited Ballistic Missile
Attack...”**

*The National Missile Defense Act Of 1999
Section 2: National Missile Defense Policy
Awaiting Presidential Signature*

*"We Are Committed To The
Development Of A Limited
National Missile Defense
System..."*

*Samuel R. Berger
Assistant to the President
for National Security Affairs
January 12, 1999*



"The NMD Program Cannot Afford To Fail."

*William S. Cohen
Secretary of Defense
January 20, 1999*

*Jacques Gansler
Under Secretary of Defense
(Acquisition & Technology)
February 2, 1999*

MISSION

Develop, Demonstrate, And Deploy (When Directed)
A System To Defend U.S. Against A Limited Strategic
Ballistic Missile Threat By A Rogue Nation...



- By 2000, Be In A Position To Make A Deployment Decision Based On An Assessment Of:

- System Technology & Operational Effectiveness
- Status Of Threat
- System Cost
- Arms Control Objectives
- Develop System Consistent With ABM Treaty
- Deployment May Require ABM Treaty Modification
- Phase Program Key Decisions To Reduce Risk

NMD KEY REQUIREMENTS



- 1. US Defense**
- 2. Human-In-Control**
- 3. Highly Automated BM/C³**

Protect All 50 States Against A Limited Attack

JOINT PROGRAM TEAM



BMDO
Director

NIMD
Program Manager

**Deputy For
System Integration**

**Prg Mgmt &
Control Office**

JPO Elements

**Ground-Based
Elements**
Interceptor/Radar

**Early
Warning
Radar**

**Space
Based
Sensors**

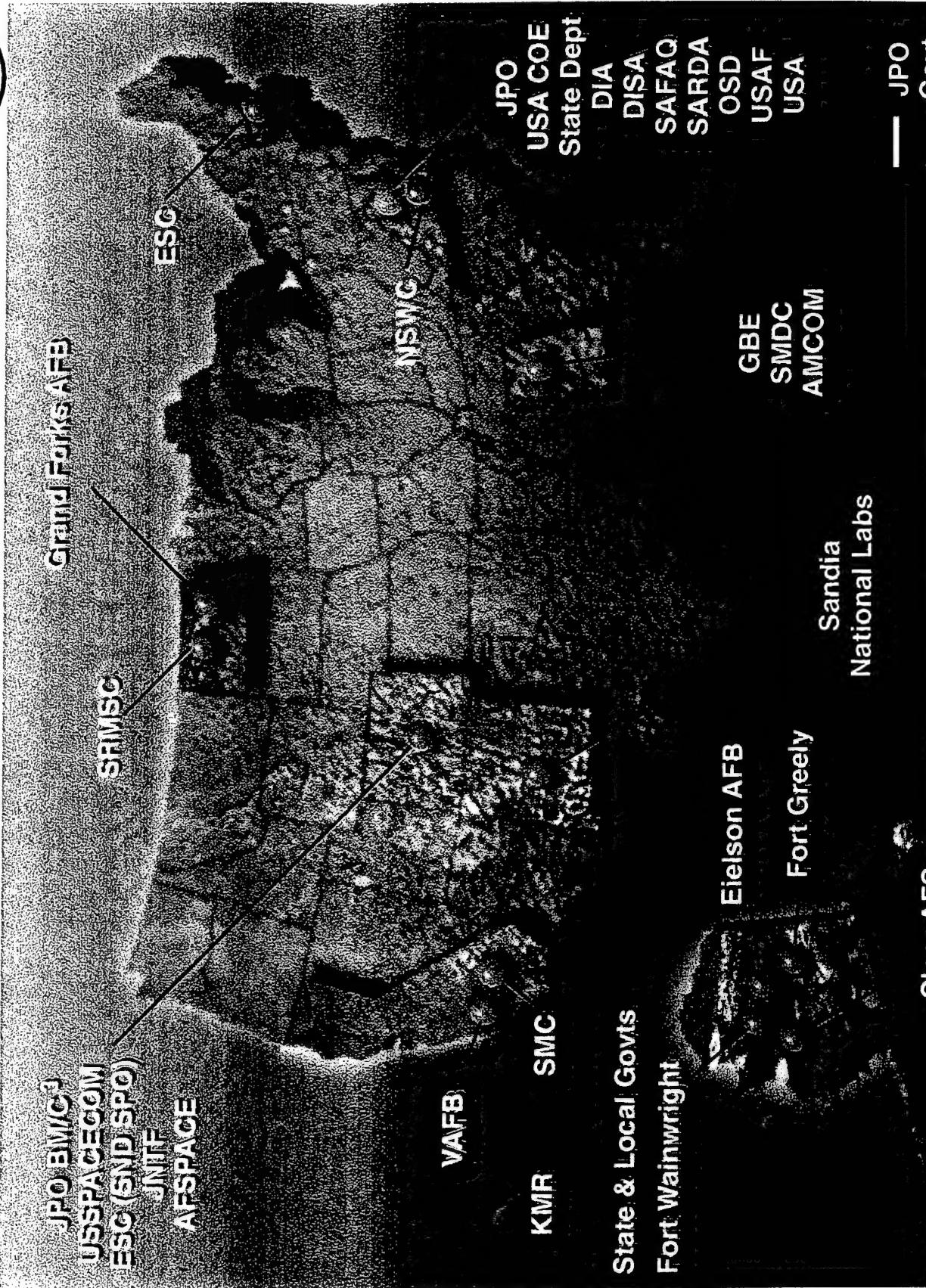
PEO-AMD
**Electronic
Systems
Center**

**Space &
Missile
Systems
Command**

Support Agencies

- OSD (P)
- State Department
- US SpaceCOM
- Defense Information Systems Agency
- Defense Intelligence Agency
- Space & Missile Damage Control
- AFSPAC
- Alaska Command
- Corps Of Engineers
- Strategic Nuclear Deterrent SDO
- Vandenberg Air Force Base
- Naval Surface Warfare Center
- Aviation & Missile Command
- Joint Munitions Test Facility
- Kwajalein Missile Test Range
- Sandia National Labs
- Kestrel Innovations

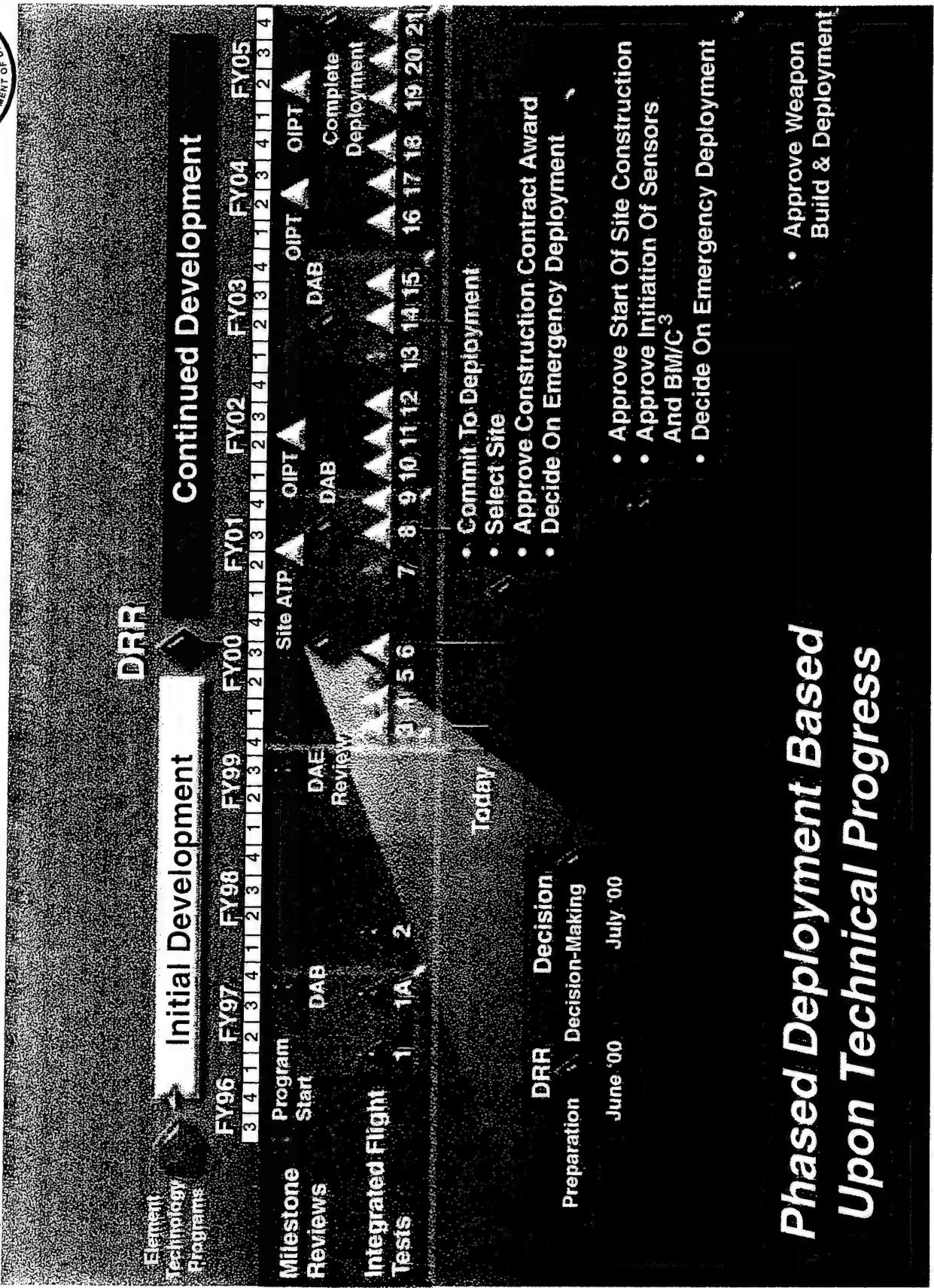
NATIONAL MISSILE DEFENSE - JPO GOVERNMENT -



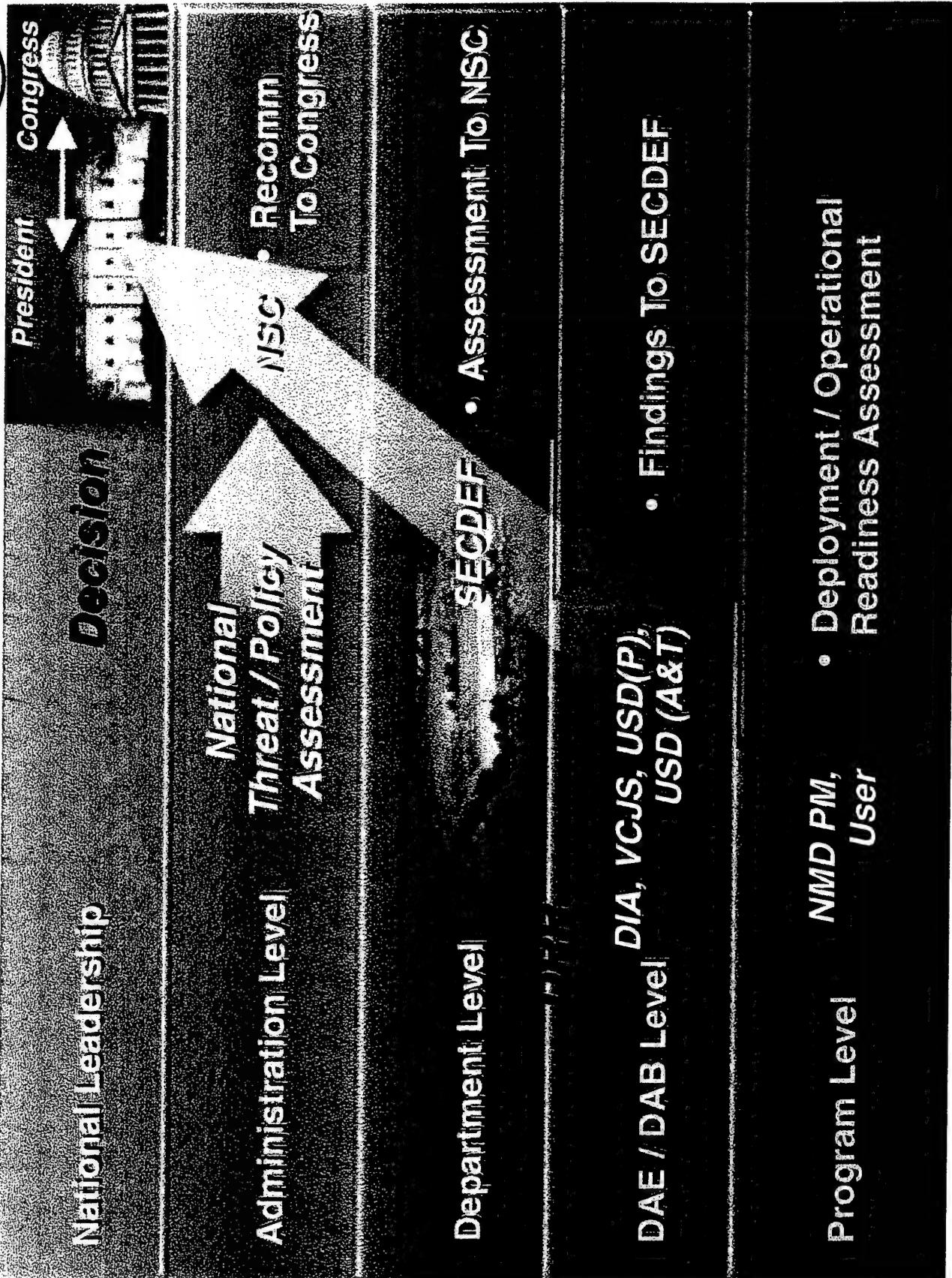
KEY DECISIONS



KEY DECISIONS



NMD DEPLOYMENT DECISION



SYSTEM ELEMENTS



SBIRS Low

DSP / SBIRS
High



KV

Space Based Infrared
System / Low Component

Kill Vehicle

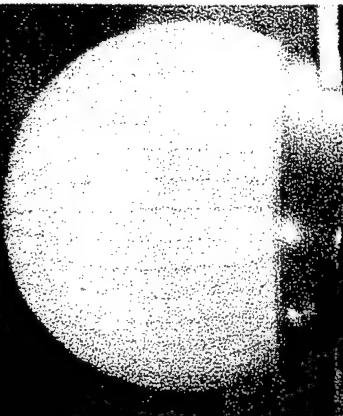
BM/C³

Defense Support Program/
Space Based Infrared System
High Component

XBR

Ballistic Missile Early Warning System

Weapon



Battle Management / Command,
Control & Communications

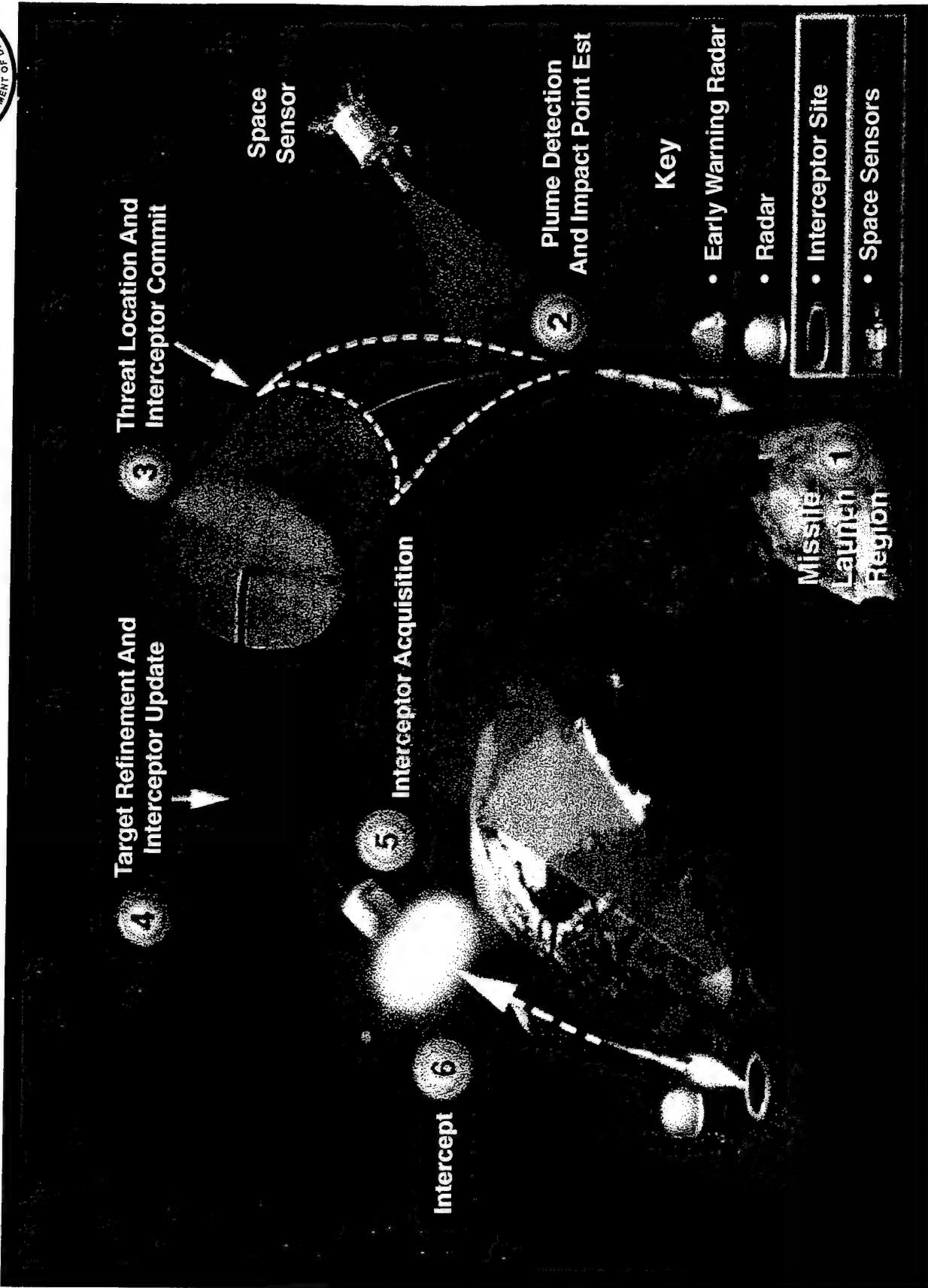
UEWR

Weapon System

X Band Radar

Upgraded Early Warning
Radar

NMD ENGAGEMENT CONOPS



NMD ELEMENT STATUS - DSP / SBIRS



DSP / SBIRS
High

- DSP Operational
- NMD Working Group Established
With Air Force In FY97
- SBIRS High
- IOC - FY06
- SBIRS Low
- FOC - FY10

SBIRS
Low

Air Force Managed Programs



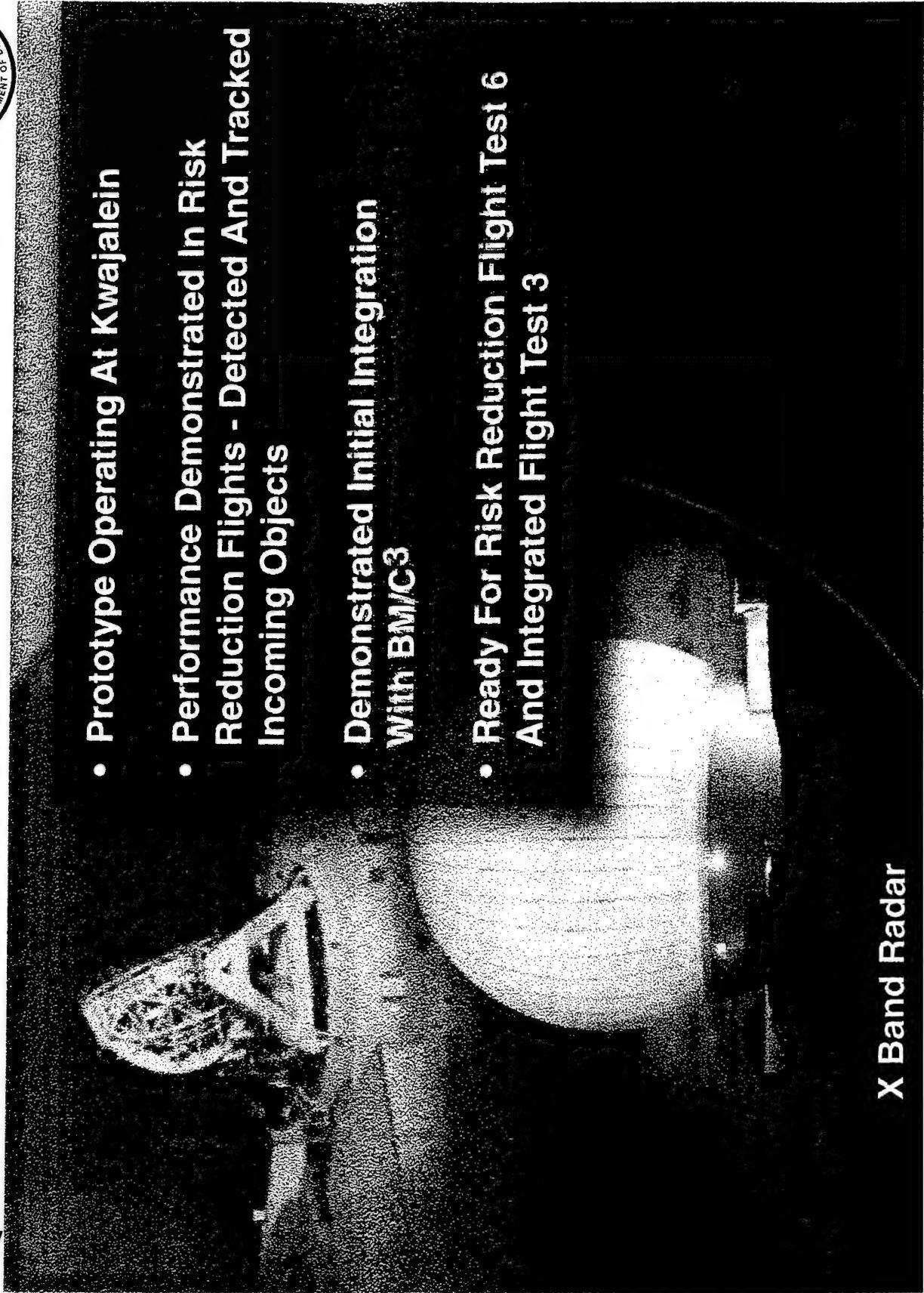
NMD UEWR STATUS



- Successfully Demonstrated Initial Integration With BM/C3 During Integrated Ground Testing (IGT-3) - FEB 99
- Successfully Tracked Risk Reduction Flight 4
- Ready For Risk Reduction Flight 6 And Integrated Flight Test 3

*Upgraded Early
Warning Radar*

X BAND RADAR



- Prototype Operating At Kwajalein
- Performance Demonstrated In Risk Reduction Flights - Detected And Tracked Incoming Objects
- Demonstrated Initial Integration With BM/C³
- Ready For Risk Reduction Flight Test 6 And Integrated Flight Test 3

X Band Radar

NMD WEAPON STATUS



- Successful Sensor Flight - JAN 98
- Successful Hover Test - NOV 98
- IFT-3 Unit In Ground Test



Operational Booster

- GEM Motor Ready For Integration
- OCT 99 (Over 520 Flown)
- Orbus Motor (25 Produced, 7 Flown
No Failures)
- Successful Burn Test - JUN 99
- First Verification Test Scheduled
- FEB 00



NMD BM/C³ / IFICS STATUS



- BM/C³ Demonstrated In Major Command And Control Exercise - DEC 98

- Demonstrated Initial Integration With Upgraded Early Warning Radar And X-Band Radar - FEB 99

- Ready For Risk Reduction Flight Test 6

Battle Management, Command
Control & Communications



In-Flight Interceptor
Communications System
(IFICS)

INTEGRATED FLIGHT TEST PROGRAM



INTRODUCTION

Flights

IFT 1 A/2



Sensor Fly-By

Program Objectives And Goals

- Risk Reduction For Kill Vehicle Tests
- Demonstrate Kill Vehicle Sensor Performance
- Collect Target Signatures To Validate Discrimination Algorithms

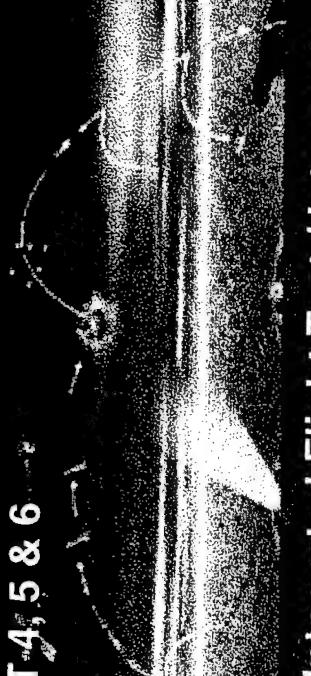
Activate Test Infrastructure

IFT 3



Intercept

IFT 4, 5 & 6



Integrated Flight Test / Intercept

BALLISTIC
DEFENSE
DEPARTMENT OF DEFENSE

BALLISTIC
DEFENSE
DEPARTMENT OF DEFENSE

IQ00

- Demo End-to-End Integrated System Performance

FY00

IIFT-3 OBJECTIVES

Primary Objective

- Demonstrate EKV Flight Test Performance
 - EKV Deployment And Orientation
 - Target Complex Acquisition
 - Track Management
 - Real-Time Onboard Discrimination
 - End Game Performance
 - Divert And Homing
 - Intercept

Key Dates

- April - KV Blowdown Test
- 24 July - Ship Flight Payload
EKV System Test Area (ESTA)
- August - Ship Flight Test H/W
To KMR
- 1000 - Scheduled Test

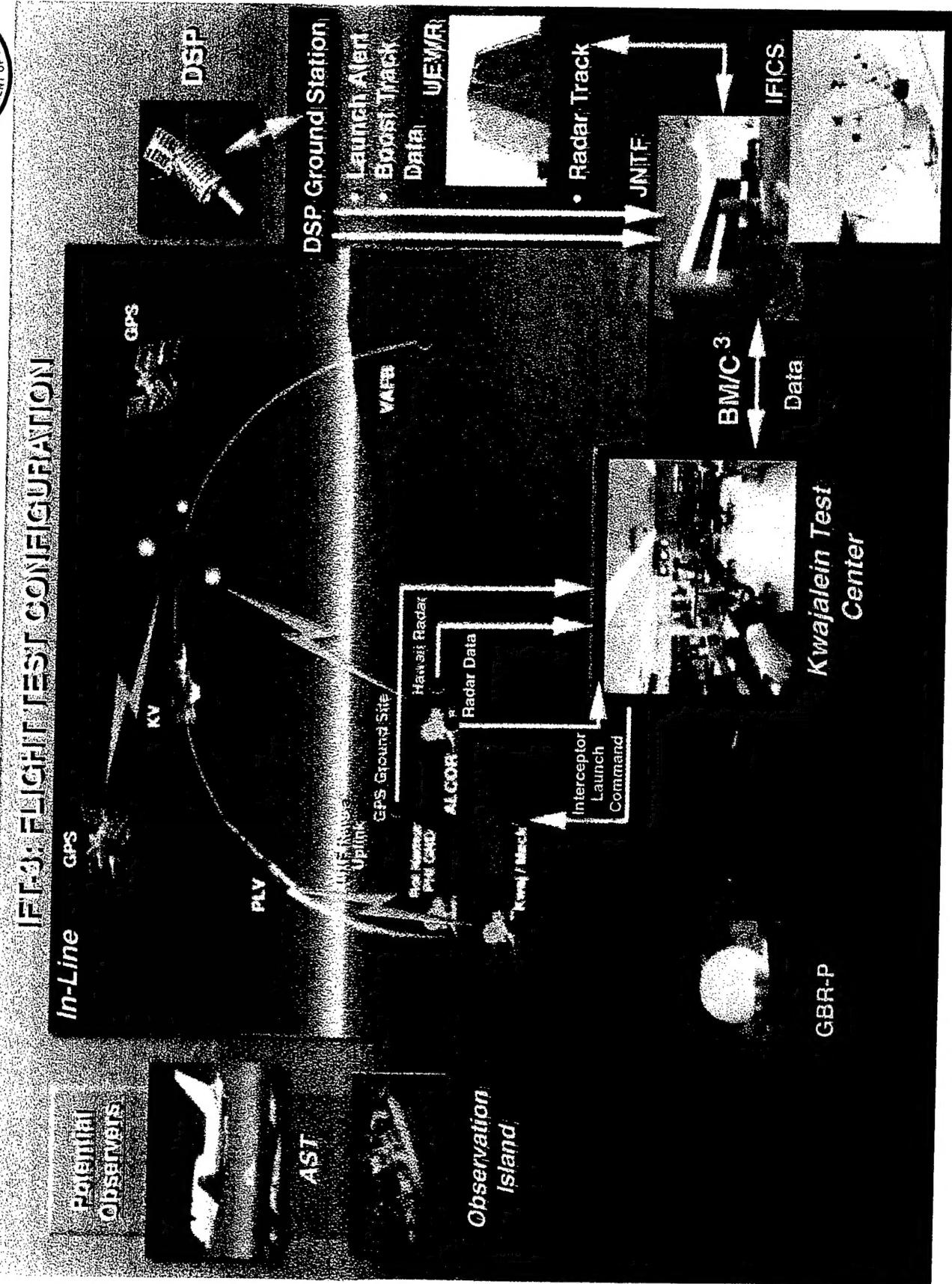
Secondary Objective

- Sensor And BM/C³ Test
- Detection And Acquisition
- System Track Performance
- Integration Of System Elements

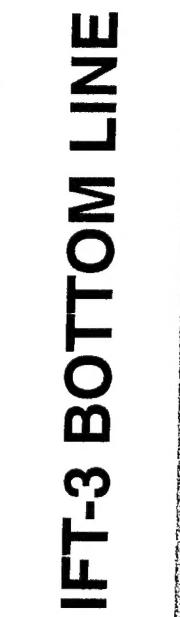
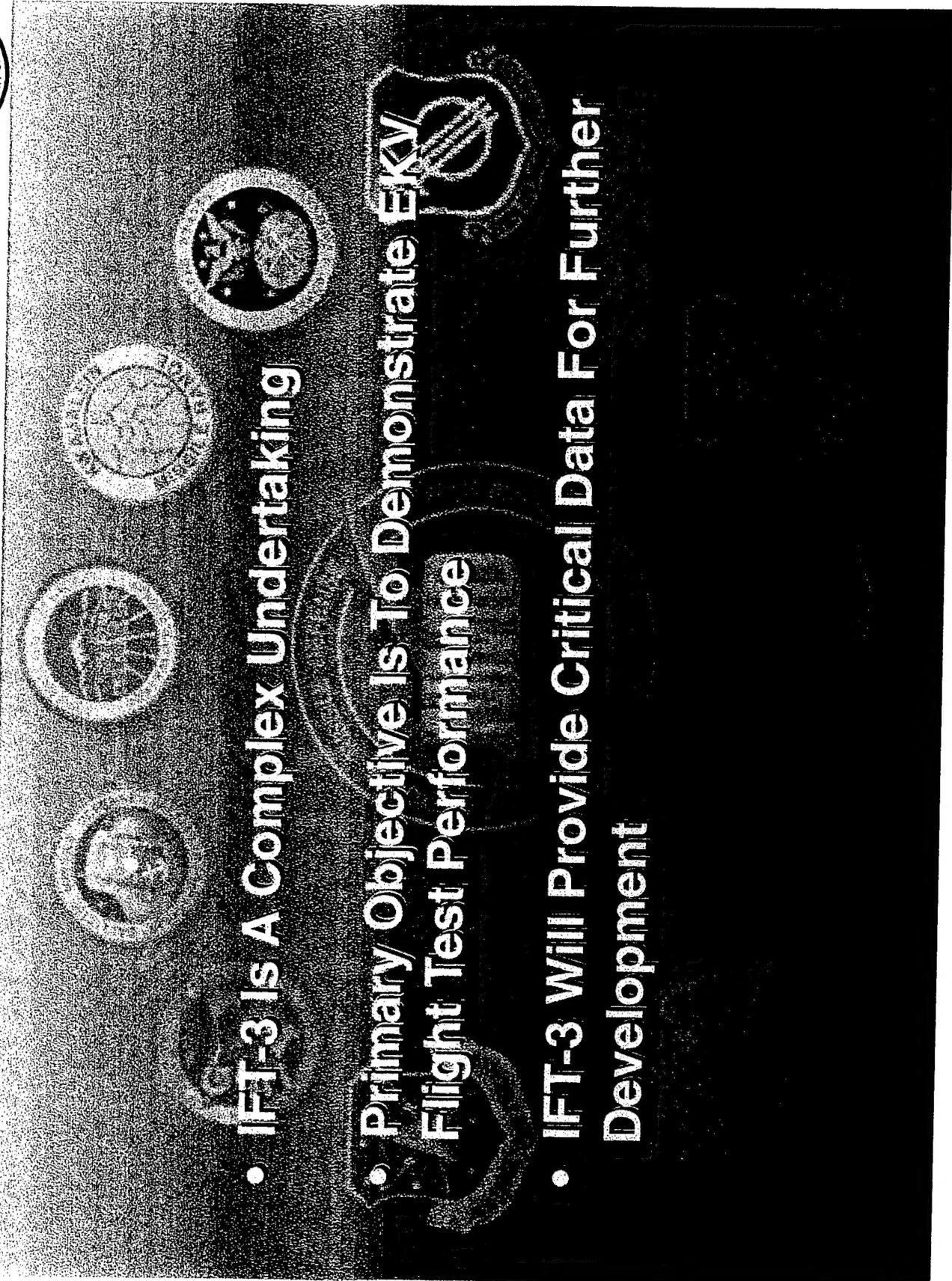
- Data Collection
 - V&V Of Models And Simulations
 - Element And System Performance Analyses
 - Impact And Lethality Analyses
 - Reliability, Availability, Maintainability Analyses
 - Assessment Of Test Infrastructure



IFT-3: FLIGHT TEST CONFIGURATION



IFT-3 BOTTOM LINE



DEPLOYMENT STATUS



Grand Forks, ND

- Fact Finding Visits And Siting Studies Conducted For ND And AK

- Notice Of Intent (NOI) - NOV 98

- Prototype Site Designs Initiated

- Public Scoping Meeting Held In AK, ND And VA - DEC 98

- Draft Environmental Impact Statement (EIS) - 4Q99

- Public Hearings On Draft EIS Scheduled

- Industry Briefings For Construction Contracts - 1Q00

- 100% Site Designs Complete - JAN 00

Fort Greely, AK



ACCOMPLISHMENTS



Program Resuscitated To
Planned Deployment

National Missile Defense
Joint Program Office

Lean System Integrator
Contract Awarded



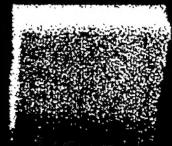
Battle Management
Cmd, Ctrl, & Comm
Capability Increment 3

Risk Reduction Flights 1-5
Integrated Ground Test 1A-3
Integrated Flight Tests 1A & 2

Grand
Forks

Fort Greely, AK

Construction At
Kwajalein



Scoping Visits Conducted
EIS Underway
For ND & AK

System
Requirements
Documents